

SEQUENCE LISTING

<110> Bartha, Gabor
Walker, Michael

<120>
METHODS FOR ANALYZING GENE EXPRESSION PATTERNS

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<151> 2000-11-01

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2000-00-00 10:00:00

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Thr Asn Gly Ile Ile His His Phe Lys Thr Met His Arg Tyr Thr Leu			
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Glu Met Phe Arg Thr Cys Gln Phe Cys Pro Gln Phe Arg Glu Ile Ile			
50	55	60	
His Lys Ala Leu Ile Asp Arg Asn Ile Gln Ala Thr Leu Glu Ser Gln			
65	70	75	80
Lys Lys Leu Asn Trp Cys Arg Glu Val Arg Lys Leu Val Ala Leu Lys			
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Thr Asn Gly Asp Gly Asn Cys Leu Met His Ala Thr Ser Gln Tyr Met			
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Trp Gly Val Gln Asp Thr Asp Leu Val Leu Arg Lys Ala Leu Phe Ser			
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Glu Ser Leu Lys Ser Gln Glu Phe Val Glu Thr Gly Leu Cys Tyr Asp			
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Thr Arg Asn Trp Asn Asp Glu Trp Asp Asn Leu Ile Lys Met Ala Ser			
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Cys Leu Gly Arg Glu Cys Gly Thr Leu Gly Ser Thr Met Phe Glu Gly		
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Tyr Cys Gln Lys Cys Phe Ile Glu Ala Gln Asn Gln Arg Phe His Glu		
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Ala Lys Arg Thr Glu Glu Gln Leu Arg Ser Ser Gln Arg Arg Asp Val		
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Pro Arg Thr Thr Gln Ser Thr Ser Arg Pro Lys Cys Ala Arg Ala Ser		
705	710	715
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35 40 45
Leu Gln Gly Ile His Leu Lys Asn Ile Gln Ser Val Lys Val Lys Ser
50 55 60
Pro Gly Pro His Cys Ala Gln Thr Glu Val Ile Ala Thr Leu Lys Asn
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35 40 45
Ile Lys Glu Leu Arg Val Ile Glu Ser Gly Pro His Cys Ala Asn Thr
50 55 60
Glu Ile Ile Val Lys Leu Ser Asp Gly Arg Glu Leu Cys Leu Asp Pro
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Glu Asn Ser

HUMAN PROTEIN

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<213> Human

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35 40 45
Asp Gly Pro Glu Ser Gln Phe Cys Pro Asn Gln Ser Leu Val Ser Leu
50 55 60
Leu Gly Asp Gln Arg Glu Ser Glu Asn Ile Ala Asn Pro Met Gln Thr
65 70 75 80
Ser Ser Ser Val Gln Gln Gln Asn Asp Ala His Leu His Ser Phe Ser
85 90 95
Met Met Pro Ser Ser Ala Cys Glu Ala Met Val Gly His Glu Met Ala
100 105 110
Ser Asp Ser Ser Asn Thr Ser Leu Pro Phe Ser Asn Met Gly Asn Pro
115 120 125

Met Asn Thr Thr Gln Leu Gly Lys Ser Leu Phe Gln Trp Gln Val Glu
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 Gln Glu Glu Ser Lys Leu Ala Asn Ile Ser Gln Asp Gln Phe Leu Ser
 145 150 155 160
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 Arg Arg Ala Leu Ser Tyr Val Leu Ala Arg Lys Met Asn Ala Leu His
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 Met Leu Asp Ile Lys Glu His Asn Gly Gln Ser Ala Phe Gln Val Ala
 195 200 205
 Val Ala Ala Asn Gln His Leu Ile Val Gln Asp Leu Val Asn Ile Gly
 210 215 220
 Ala Gln Val Asn Thr Thr Asp Cys Trp Gly Arg Thr Pro Leu His Val
 225 230 235 240
 Cys Ala Glu Lys Gly His Ser Gln Val Leu Gln Ala Ile Gln Lys Gly
 245 250 255
 Ala Val Gly Ser Asn Gln Phe Val Asp Leu Glu Ala Thr Asn Tyr Asp
 260 265 270
 Gly Leu Thr Pro Leu His Cys Ala Val Ile Ala His Asn Ala Val Val
 275 280 285
 His Glu Leu Gln Arg Asn Gln Gln Pro His Ser Pro Glu Val Gln Glu
 290 295 300
 Leu Leu Leu Lys Asn Lys Ser Leu Val Asp Thr Ile Lys Cys Leu Ile
 305 310 315 320
 Gln Met Gly Ala Ala Val Glu Ala Lys Ala Tyr Asn Gly Asn Thr Ala
 325 330 335
 Leu His Val Ala Ala Ser Leu Gln Tyr Arg Leu Thr Gln Leu Asp Ala
 340 345 350
 Val Arg Leu Leu Met Arg Lys Gly Ala Asp Pro Ser Thr Arg Asn Leu
 355 360 365
 Glu Asn Glu Gln Pro Val His Leu Val Pro Asp Gly Pro Val Gly Glu
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 385 390 395 400
 Pro Tyr

<210> 9
 <211> 1057
 <212> DNA
 <213> Human

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 aagatgctga acagtgacaa atccaaactga ccagaaggaa ggaggaagct cactgggtggc 420
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 gagggccacct ggatttgcc taatgtgtt gaggatcgct taggagaagt cttctattta 540
 tttatattt cattatgtttt gaagattcta tgttaatatt ttaggtgtaa aataattaag 600
 ggtatgatta actctacactg cacactgtcc tattatattc attcttttg aaatgtcaac 660

TOP SECRET

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<211> 107
<212> PRT
<213> Human

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35 40 45
Leu Gln Gly Ile His Pro Lys Asn Ile Gln Ser Val Asn Val Lys Ser
50 55 60
Pro Gly Pro His Cys Ala Gln Thr Glu Val Ile Ala Thr Leu Lys Asn
65 70 75 80
Gly Arg Lys Ala Cys Leu Asn Pro Ala Ser Pro Ile Val Lys Lys Ile
85 90 95
Ile Glu Lys Met Leu Asn Ser Asp Lys Ser Asn
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<210> 11
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<223> n = A,T,C or G

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<213> Human

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35 40 45
Glu Lys Asn Leu Lys Ser Cys Leu Asp Asn Val Asn Val Val Ser Val
50 55 60
Asp Thr Ala Arg Thr Leu Phe Asn Gln Val Met Glu Lys Glu Phe Glu
65 70 75 80
Asp Asp Ile Ile Asn Trp Gly Arg Ile Val Thr Ile Phe Ala Phe Glu
85 90 95
Gly Ile Leu Ile Lys Lys Leu Leu Arg Gln Gln Ile Ala Pro Asp Val
100 105 110
Asp Thr Tyr Lys Glu Ile Ser Tyr Phe Val Ala Glu Phe Ile Met Asn
115 120 125
Asn Thr Gly Glu Trp Ile Arg Gln Asn Gly Gly Trp Glu Asn Gly Phe
130 135 140
Val Lys Lys Phe Glu Pro Lys Ser Gly Trp Met Thr Phe Leu Glu Val
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Thr Gly Lys Ile Cys Glu Met Leu Ser Leu Leu Lys Gln Tyr Cys
165 170 175

<210> 13
<211> 800
<212> DNA
<213> Human

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<211> 81
<212> PRT
<213> Human

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Ser Gly Arg Arg Thr Arg Leu Cys Cys His Arg Val Pro Ser Pro Asn
35 40 45
Ser Thr Asn Leu Lys Gly His His Val Arg Leu Cys Lys Pro Cys Lys
50 55 60
Leu Glu Pro Glu Pro Arg Leu Trp Val Val Pro Gly Ala Leu Pro Gln
65 70 75 80
Val

<210> 15
<211> 3169
<212> DNA
<213> Human

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gtgggaaagg acacgttctt tctcatcaca tggaaacagtc tgcctccag tattttcttc 1620
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卷之三

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<210> 16
<211> 917
<212> PRT
<213> Human

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      20          25          30
Asp Ile Val Ile Val Ile Asp Pro Ser Val Pro Glu Asp Glu Lys Ile
      35          40          45
Ile Glu Gln Ile Glu Asp Met Val Thr Thr Ala Ser Thr Tyr Leu Phe
      50          55          60
Glu Ala Thr Glu Lys Arg Phe Phe Lys Asn Val Ser Ile Leu Ile
      65          70          75          80
Pro Glu Asn Trp Lys Glu Asn Pro Gln Tyr Lys Arg Pro Lys His Glu
      85          90          95
Asn His Lys His Ala Asp Val Ile Val Ala Pro Pro Thr Leu Pro Gly
      100         105         110
Arg Asp Glu Pro Tyr Thr Lys Gln Phe Thr Glu Cys Gly Glu Lys Gly
      115         120         125
Glu Tyr Ile His Phe Thr Pro Asp Leu Leu Leu Gly Lys Lys Gln Asn
      130         135         140
Glu Tyr Gly Pro Pro Gly Lys Leu Phe Val His Glu Trp Ala His Leu
      145         150         155         160
Arg Trp Gly Val Phe Asp Glu Tyr Asn Glu Asp Gln Pro Phe Tyr Arg
      165         170         175
Ala Lys Ser Lys Lys Ile Glu Ala Thr Arg Cys Ser Ala Gly Ile Ser

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TOP SECRET

180	185	190
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195	200	205
Ala Cys Arg Ile Asp Ser Thr Thr Lys Leu Tyr Gly Lys Asp Cys Gln		
210	215	220
Phe Phe Pro Asp Lys Val Gln Thr Glu Lys Ala Ser Ile Met Phe Met		
225	230	235
Gln Ser Ile Asp Ser Val Val Glu Phe Cys Asn Glu Lys Thr His Asn		
245	250	255
Gln Glu Ala Pro Ser Leu Gln Asn Ile Lys Cys Asn Phe Arg Ser Thr		
260	265	270
Trp Glu Val Ile Ser Asn Ser Glu Asp Phe Lys Asn Thr Ile Pro Met		
275	280	285
Val Thr Pro Pro Pro Val Phe Ser Leu Leu Lys Ile Ser Gln		
290	295	300
Arg Ile Val Cys Leu Val Leu Asp Lys Ser Gly Ser Met Gly Gly Lys		
305	310	315
Asp Arg Leu Asn Arg Met Asn Gln Ala Ala Lys His Phe Leu Leu Gln		
325	330	335
Thr Val Glu Asn Gly Ser Trp Val Gly Met Val His Phe Asp Ser Thr		
340	345	350
Ala Thr Ile Val Asn Lys Leu Ile Gln Ile Lys Ser Ser Asp Glu Arg		
355	360	365
Asn Thr Leu Met Ala Gly Leu Pro Thr Tyr Pro Leu Gly Gly Thr Ser		
370	375	380
Ile Cys Ser Gly Ile Lys Tyr Ala Phe Gln Val Ile Gly Glu Leu His		
385	390	395
Ser Gln Leu Asp Gly Ser Glu Val Leu Leu Leu Thr Asp Gly Glu Asp		
405	410	415
Asn Thr Ala Ser Ser Cys Ile Asp Glu Val Lys Gln Ser Gly Ala Ile		
420	425	430
Val His Phe Ile Ala Leu Gly Arg Ala Ala Asp Glu Ala Val Ile Glu		
435	440	445
Met Ser Lys Ile Thr Gly Gly Ser His Phe Tyr Val Ser Asp Glu Ala		
450	455	460
Gln Asn Asn Gly Leu Ile Asp Ala Phe Gly Ala Leu Thr Ser Gly Asn		
465	470	475
Thr Asp Leu Ser Gln Lys Ser Leu Gln Leu Glu Ser Lys Gly Leu Thr		
485	490	495
Leu Asn Ser Asn Ala Trp Met Asn Asp Thr Val Ile Ile Asp Ser Thr		
500	505	510
Val Gly Lys Asp Thr Phe Phe Leu Ile Thr Trp Asn Ser Leu Pro Pro		
515	520	525
Ser Ile Ser Leu Trp Asp Pro Ser Gly Thr Ile Met Glu Asn Phe Thr		
530	535	540
Val Asp Ala Thr Ser Lys Met Ala Tyr Leu Ser Ile Pro Gly Thr Ala		
545	550	555
Lys Val Gly Thr Trp Ala Tyr Asn Leu Gln Ala Lys Ala Asn Pro Glu		
565	570	575
Thr Leu Thr Ile Thr Val Thr Ser Arg Ala Ala Asn Ser Ser Val Pro		
580	585	590
Pro Ile Thr Val Asn Ala Lys Met Asn Lys Asp Val Asn Ser Phe Pro		
595	600	605
Ser Pro Met Ile Val Tyr Ala Glu Ile Leu Gln Gly Tyr Val Pro Val		
610	615	620

Leu Gly Ala Asn Val Thr Ala Phe Ile Glu Ser Gln Asn Gly His Thr
 625 630 635 640
 Glu Val Leu Glu Leu Leu Asp Asn Gly Ala Gly Ala Asp Ser Phe Lys
 645 650 655
 Asn Asp Gly Val Tyr Ser Arg Tyr Phe Thr Ala Tyr Thr Glu Asn Gly
 660 665 670
 Arg Tyr Ser Leu Lys Val Arg Ala His Gly Gly Ala Asn Thr Ala Arg
 675 680 685
 Leu Lys Leu Arg Pro Pro Leu Asn Arg Ala Ala Tyr Ile Pro Gly Trp
 690 695 700
 Val Val Asn Gly Glu Ile Glu Ala Asn Pro Pro Arg Pro Glu Ile Asp
 705 710 715 720
 Glu Asp Thr Gln Thr Thr Leu Glu Asp Phe Ser Arg Thr Ala Ser Gly
 725 730 735
 Gly Ala Phe Val Val Ser Gln Val Pro Ser Leu Pro Leu Pro Asp Gln
 740 745 750
 Tyr Pro Pro Ser Gln Ile Thr Asp Leu Asp Ala Thr Val His Glu Asp
 755 760 765
 Lys Ile Ile Leu Thr Trp Thr Ala Pro Gly Asp Asn Phe Asp Val Gly
 770 775 780
 Lys Val Gln Arg Tyr Ile Ile Arg Ile Ser Ala Ser Ile Leu Asp Leu
 785 790 795 800
 Arg Asp Ser Phe Asp Asp Ala Leu Gln Val Asn Thr Thr Asp Leu Ser
 805 810 815
 Pro Lys Glu Ala Asn Ser Lys Glu Ser Phe Ala Phe Lys Pro Glu Asn
 820 825 830
 Ile Ser Glu Glu Asn Ala Thr His Ile Phe Ile Ala Ile Lys Ser Ile
 835 840 845
 Asp Lys Ser Asn Leu Thr Ser Lys Val Ser Asn Ile Ala Gln Val Thr
 850 855 860
 Leu Phe Ile Pro Gln Ala Asn Pro Asp Asp Ile Asp Pro Thr Pro Thr
 865 870 875 880
 Pro Thr Pro Thr Pro Asp Lys Ser His Asn Ser Gly Val Asn Ile Ser
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 <211> 737
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<210> 18
<211> 198
<212> PRT
<213> Human

<400> 18
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35 40 45
Ala Ile Gln Ala Arg Ser Ser Ser Tyr Ser Gly Glu Tyr Gly Ser Gly
50 55 60
Gly Gly Lys Arg Phe Ser His Ser Gly Asn Gln Leu Asp Gly Pro Ile
65 70 75 80
Thr Ala Leu Arg Val Arg Val Asn Thr Tyr Tyr Ile Val Gly Leu Gln
85 90 95
Val Arg Tyr Gly Lys Val Trp Ser Asp Tyr Val Gly Gly Arg Asn Gly
100 105 110
Asp Leu Glu Glu Ile Phe Leu His Pro Gly Glu Ser Val Ile Gln Val
115 120 125
Ser Gly Lys Tyr Lys Trp Tyr Leu Lys Lys Leu Val Phe Val Thr Asp
130 135 140
Lys Gly Arg Tyr Leu Ser Phe Gly Lys Asp Ser Gly Thr Ser Phe Asn
145 150 155 160
Ala Val Pro Leu His Pro Asn Thr Val Leu Arg Phe Ile Ser Gly Arg
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Ser Gly Ser Leu Ile Asp Ala Ile Gly Leu His Trp Asp Val Tyr Pro
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Thr Ser Cys Ser Arg Cys
195

<210> 19
<211> 2879
<212> DNA
<213> Human

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五〇〇 五〇一

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<210> 20
<211> 764
<212> PRT
<213> Human

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Ser Thr Asn Ala Phe Glu Glu Asn His Lys Lys Thr Gly Arg His His
   20          25          30
Lys Thr Phe Leu Asp His Leu Lys Val Cys Cys Ser Cys Ser Pro Gln
   35          40          45
Lys Ala Lys Arg Ile Val Leu Ser Leu Phe Pro Ile Ala Ser Trp Leu
   50          55          60
Pro Ala Tyr Arg Leu Lys Glu Trp Leu Leu Ser Asp Ile Val Ser Gly
   65          70          75          80

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J. MOLECULAR BIOLOGY

Ile Ser Thr Gly Ile Val Ala Val Leu Gln Gly Leu Ala Phe Ala Leu		
85	90	95
Leu Val Asp Ile Pro Pro Val Tyr Gly Leu Tyr Ala Ser Phe Phe Pro		
100	105	110
Ala Ile Ile Tyr Leu Phe Phe Gly Thr Ser Arg His Ile Ser Val Gly		
115	120	125
Pro Phe Pro Ile Leu Ser Met Met Val Gly Leu Ala Val Ser Gly Ala		
130	135	140
Val Ser Lys Ala Val Pro Asp Arg Asn Ala Thr Thr Leu Gly Leu Pro		
145	150	155
Asn Asn Ser Asn Asn Ser Ser Leu Leu Asp Asp Glu Arg Val Arg Val		
165	170	175
Ala Ala Ala Ala Ser Val Thr Val Leu Ser Gly Ile Ile Gln Leu Ala		
180	185	190
Phe Gly Ile Leu Arg Ile Gly Phe Val Val Ile Tyr Leu Ser Glu Ser		
195	200	205
Leu Ile Ser Gly Phe Thr Thr Ala Ala Ala Val His Val Leu Val Ser		
210	215	220
Gln Leu Lys Phe Ile Phe Gln Leu Thr Val Pro Ser His Thr Asp Pro		
225	230	235
Val Ser Ile Phe Lys Val Leu Tyr Ser Val Phe Ser Gln Ile Glu Lys		
245	250	255
Thr Asn Ile Ala Asp Leu Val Thr Ala Leu Ile Val Leu Val Val		
260	265	270
Ser Ile Val Lys Glu Ile Asn Gln Arg Phe Lys Asp Lys Leu Pro Val		
275	280	285
Pro Ile Pro Ile Glu Phe Ile Met Thr Val Ile Ala Ala Gly Val Ser		
290	295	300
Tyr Gly Cys Asp Phe Lys Asn Arg Phe Lys Val Ala Val Val Gly Asp		
305	310	315
Met Asn Pro Gly Phe Gln Pro Pro Ile Thr Pro Asp Val Glu Thr Phe		
325	330	335
Gln Asn Thr Val Gly Asp Cys Phe Gly Ile Ala Met Val Ala Phe Ala		
340	345	350
Val Ala Phe Ser Val Ala Ser Val Tyr Ser Leu Lys Tyr Asp Tyr Pro		
355	360	365
Leu Asp Gly Asn Gln Glu Leu Ile Ala Leu Gly Leu Gly Asn Ile Val		
370	375	380
Cys Gly Val Phe Arg Gly Phe Ala Gly Ser Thr Ala Leu Ser Arg Ser		
385	390	395
Ala Val Gln Glu Ser Thr Gly Gly Lys Thr Gln Ile Ala Gly Leu Ile		
405	410	415
Gly Ala Ile Ile Val Leu Ile Val Val Leu Ala Ile Gly Phe Leu Leu		
420	425	430
Ala Pro Leu Gln Lys Ser Val Leu Ala Ala Leu Ala Leu Gly Asn Leu		
435	440	445
Lys Gly Met Leu Met Gln Phe Ala Glu Ile Gly Arg Leu Trp Arg Lys		
450	455	460
Asp Lys Tyr Asp Cys Leu Ile Trp Ile Met Thr Phe Ile Phe Thr Ile		
465	470	475
Val Leu Gly Leu Gly Leu Gly Leu Ala Ala Ser Val Ala Phe Gln Leu		
485	490	495
Leu Thr Ile Val Phe Arg Thr Gln Phe Pro Lys Cys Ser Thr Leu Ala		
500	505	510
Asn Ile Gly Arg Thr Asn Ile Tyr Lys Asn Lys Lys Asp Tyr Tyr Asp		

515 520 525
 Met Tyr Glu Pro Glu Gly Val Lys Ile Phe Arg Cys Pro Ser Pro Ile
 530 535 540
 Tyr Phe Ala Asn Ile Gly Phe Phe Arg Arg Lys Leu Ile Asp Ala Val
 545 550 555 560
 Gly Phe Ser Pro Leu Arg Ile Leu Arg Lys Arg Asn Lys Ala Leu Arg
 565 570 575
 Lys Ile Arg Lys Leu Gln Lys Gln Gly Leu Leu Gln Val Thr Pro Lys
 580 585 590
 Gly Phe Ile Cys Thr Val Asp Thr Ile Lys Asp Ser Asp Glu Glu Leu
 595 600 605
 Asp Asn Asn Gln Ile Glu Val Leu Asp Gln Pro Ile Asn Thr Thr Asp
 610 615 620
 Leu Pro Phe His Ile Asp Trp Asn Asp Asp Leu Pro Leu Asn Ile Glu
 625 630 635 640
 Val Pro Lys Ile Ser Leu His Ser Leu Ile Leu Asp Phe Ser Ala Val
 645 650 655
 Ser Phe Leu Asp Val Ser Ser Val Arg Gly Leu Lys Ser Ile Leu Gln
 660 665 670
 Glu Phe Ile Arg Ile Lys Val Asp Val Tyr Ile Val Gly Thr Asp Asp
 675 680 685
 Asp Phe Ile Glu Lys Leu Asn Arg Tyr Glu Phe Phe Asp Gly Glu Val
 690 695 700
 Lys Ser Ser Ile Phe Phe Leu Thr Ile His Asp Ala Val Leu His Ile
 705 710 715 720
 Leu Met Lys Lys Asp Tyr Ser Thr Ser Lys Phe Asn Pro Ser Gln Glu
 725 730 735
 Lys Asp Gly Lys Ile Asp Phe Thr Ile Asn Thr Asn Gly Gly Leu Arg
 740 745 750
 Asn Arg Val Tyr Glu Val Pro Val Glu Thr Lys Phe
 755 760

<210> 21
 <211> 655
 <212> DNA
 <213> Human

<400> 21
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 cctggggccgc cttggcagga ggggtcaccg tgcaggatgg aaatttctcc ttttctctgg 180
 agtcagtgaa gaagctaaa gacctccagg agccccagga gcccagggtt gggaaaactca 240
 ggaactttgc acccatccct ggtgaacctg tggttcccat cctctgttagc aacccgaact 300
 ttccagaaga actcaaggct ctctgcaagg agcccaatgc ccaggagata cttcagaggc 360
 tggaggaaat cgctgaggac cccggcacat gtgaaatctg tgccctacgct gcctgtaccg 420
 gatgctaggg gggcttgccc actgcctgcc tcccctccgc agcaggaaag ctctttctc 480
 ctgcagaaag ggccaccat gatactccac tcccagcagc tcaaacctacc ctggtccagt 540
 cgggaggagc agccccggga ggaactgggt gactggaggc ctcgccccaa cactgtcctt 600
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<210> 22
 <211> 115
 <212> PRT
 <213> Human

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Ala Leu Ala Gly Gly Val Thr Val Gln Asp Gly Asn Phe Ser Phe Ser
      20          25          30
Leu Glu Ser Val Lys Lys Leu Lys Asp Leu Gln Glu Pro Gln Glu Pro
      35          40          45
Arg Val Gly Lys Leu Arg Asn Phe Ala Pro Ile Pro Gly Glu Pro Val
      50          55          60
Val Pro Ile Leu Cys Ser Asn Pro Asn Phe Pro Glu Glu Leu Lys Pro
      65          70          75          80
Leu Cys Lys Glu Pro Asn Ala Gln Glu Ile Leu Gln Arg Leu Glu Glu
      85          90          95
Ile Ala Glu Asp Pro Gly Thr Cys Glu Ile Cys Ala Tyr Ala Ala Cys
      100         105         110
Thr Gly Cys
      115

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<210> 23
<211> 1244
<212> DNA
<213> Human

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gaagataatg gcaagtccag actggggata tgatgacaaa aatggtcctg aacaatggag 180
caagctgtat cccattgcca atggaaataa ccagtcctt gttgatattaa aaccaggta 240
aaccacacat gacacctctc tgaaacctat tagtgtctcc tacaacccag ccacagccaa 300
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agtgctgaaa ggtggtcctt tctctgacag ctacaggctc tttcagttcc attttcactg 420
gggcagttaca aatgagcatg gttcagaaca tacagtggat ggagtcaaatttctgcga 480
gcttcacgta gctcaactgga attctgcaaa gtactccagc cttgctgaag ctgcctcaaa 540
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<210> 24
<211> 261
<212> PRT
<213> Human

<400> 24
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Asp Ile Lys Thr Ser Glu Thr Lys His Asp Thr Ser Leu Lys Pro Ile			
35	40	45	
Ser Val Ser Tyr Asn Pro Ala Thr Ala Lys Glu Ile Ile Asn Val Gly			
50	55	60	
His Ser Phe His Val Asn Phe Glu Asp Asn Asp Asn Arg Ser Val Leu			
65	70	75	80
Lys Gly Gly Pro Phe Ser Asp Ser Tyr Arg Leu Phe Gln Phe His Phe			
85	90	95	
His Trp Gly Ser Thr Asn Glu His Gly Ser Glu His Thr Val Asp Gly			
100	105	110	
Val Lys Tyr Ser Ala Glu Leu His Val Ala His Trp Asn Ser Ala Lys			
115	120	125	
Tyr Ser Ser Leu Ala Glu Ala Ala Ser Lys Ala Asp Gly Leu Ala Val			
130	135	140	
Ile Gly Val Leu Met Lys Val Gly Glu Ala Asn Pro Lys Leu Gln Lys			
145	150	155	160
Val Leu Asp Ala Leu Gln Ala Ile Lys Thr Lys Gly Lys Arg Ala Pro			
165	170	175	
Phe Thr Asn Phe Asp Pro Ser Thr Leu Leu Pro Ser Ser Leu Asp Phe			
180	185	190	
Trp Thr Tyr Pro Gly Ser Leu Thr His Pro Pro Leu Tyr Glu Ser Val			
195	200	205	
Thr Trp Ile Ile Cys Lys Glu Ser Ile Ser Val Ser Ser Glu Gln Leu			
210	215	220	
Ala Gln Phe Arg Ser Leu Leu Ser Asn Val Glu Gly Asp Asn Ala Val			
225	230	235	240
Pro Met Gln His Asn Asn Arg Pro Thr Gln Pro Leu Lys Gly Arg Thr			
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Val Arg Ala Ser Phe			
260			

<210> 25
<211> 3111
<212> DNA
<213> Human

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cgccagacgg agaaggcttc tataatgtttt gcacaacatg ttgatctat agttaattc 780
tgtacagaac aaaaccacaa caaagaagct ccaaacaagc aaaatcaaaa atgcaatctc 840

XEROX

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taaaaactat ccattcaaaac cccaaaatttt aataatcattt gagtcttttta ttaatgtattt 3060
tgaatacttag aaagaaacag ggcttgcattc aataatggaa agttagt 3111

<210> 26

<211> 914

<212> PRT

<213> Human

<400> 26

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								20						25	30
Glu	Gly	Ile	Val	Val	Ala	Ile	Asp	Pro	Asn	Val	Pro	Glu	Asp	Glu	Thr
								35						40	45
Ley	Ile	Gln	Gln	Ile	Lys	Asp	Met	Val	Thr	Gln	Ala	Ser	Ley	Tyr	Ley
								50						55	60
Phe	Glu	Ala	Thr	Gly	Lys	Arg	Phe	Tyr	Phe	Lys	Asn	Val	Ala	Ile	Ley
								65						70	75
															80

Ile Pro Glu Thr Trp Lys Thr Lys Ala Asp Tyr Val Arg Pro Lys Leu
 85 90 95
 Glu Thr Tyr Lys Asn Ala Asp Val Leu Val Ala Glu Ser Thr Pro Pro
 100 105 110
 Gly Asn Asp Glu Pro Tyr Thr Glu Gln Met Gly Asn Cys Gly Glu Lys
 115 120 125
 Gly Glu Arg Ile His Leu Thr Pro Asp Phe Ile Ala Gly Lys Lys Leu
 130 135 140
 Ala Glu Tyr Gly Pro Gln Gly Arg Ala Phe Val His Glu Trp Ala His
 145 150 155 160
 Leu Arg Trp Gly Val Phe Asp Glu Tyr Asn Asn Asp Glu Lys Phe Tyr
 165 170 175
 Leu Ser Asn Gly Arg Ile Gln Ala Val Arg Cys Ser Ala Gly Ile Thr
 180 185 190
 Gly Thr Asn Val Val Lys Lys Cys Gln Gly Gly Ser Cys Tyr Thr Lys
 195 200 205
 Arg Cys Thr Phe Asn Lys Val Thr Gly Leu Tyr Glu Lys Gly Cys Glu
 210 215 220
 Phe Val Leu Gln Ser Arg Gln Thr Glu Lys Ala Ser Ile Met Phe Ala
 225 230 235 240
 Gln His Val Asp Ser Ile Val Glu Phe Cys Thr Glu Gln Asn His Asn
 245 250 255
 Lys Glu Ala Pro Asn Lys Gln Asn Gln Lys Cys Asn Leu Arg Ser Thr
 260 265 270
 Trp Glu Val Ile Arg Asp Ser Glu Asp Phe Lys Lys Thr Thr Pro Met
 275 280 285
 Thr Thr Gln Pro Pro Asn Pro Thr Phe Ser Leu Leu Gln Ile Gly Gln
 290 295 300
 Arg Ile Val Cys Leu Val Leu Asp Lys Ser Gly Ser Met Ala Thr Gly
 305 310 315 320
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 325 330 335
 Thr Val Glu Leu Gly Ser Trp Val Gly Met Val Thr Phe Asp Ser Ala
 340 345 350
 Ala His Val Gln Ser Glu Leu Ile Gln Ile Asn Ser Gly Ser Asp Arg
 355 360 365
 Asp Thr Leu Ala Lys Arg Leu Pro Ala Ala Ala Ser Gly Gly Thr Ser
 370 375 380
 Ile Cys Ser Gly Leu Arg Ser Ala Phe Thr Val Ile Arg Lys Lys Tyr
 385 390 395 400
 Pro Thr Asp Gly Ser Glu Ile Val Leu Leu Thr Asp Gly Glu Asp Asn
 405 410 415
 Thr Ile Ser Gly Cys Phe Asn Glu Val Lys Gln Ser Gly Ala Ile Ile
 420 425 430
 His Thr Val Ala Leu Gly Pro Ser Ala Ala Gln Glu Leu Glu Glu Leu
 435 440 445
 Ser Lys Met Thr Gly Gly Leu Gln Thr Tyr Ala Ser Asp Gln Val Gln
 450 455 460
 Asn Asn Gly Leu Ile Asp Ala Phe Gly Ala Leu Ser Ser Gly Asn Gly
 465 470 475 480
 Ala Val Ser Gln Arg Ser Ile Gln Leu Glu Ser Lys Gly Leu Thr Leu
 485 490 495
 Gln Asn Ser Gln Trp Met Asn Gly Thr Val Ile Val Asp Ser Thr Val
 500 505 510
 Gly Lys Asp Thr Leu Phe Leu Ile Thr Trp Thr Thr Gln Pro Pro Gln

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515	520	525
Ile Leu Leu Trp Asp Pro Ser Gly Gln Lys Gln Gly	Gly Phe Val Val	
530	535	540
Asp Lys Asn Thr Lys Met Ala Tyr Leu Gln Ile Pro Gly Ile Ala Lys		
545	550	555
Val Gly Thr Trp Lys Tyr Ser Leu Gln Ala Ser Ser Gln Thr Leu Thr		560
565	570	575
Leu Thr Val Thr Ser Arg Ala Ser Asn Ala Thr Leu Pro Pro Ile Thr		
580	585	590
Val Thr Ser Lys Thr Asn Lys Asp Thr Ser Lys Phe Pro Ser Pro Leu		
595	600	605
Val Val Tyr Ala Asn Ile Arg Gln Gly Ala Ser Pro Ile Leu Arg Ala		
610	615	620
Ser Val Thr Ala Leu Ile Glu Ser Val Asn Gly Lys Thr Val Thr Leu		
625	630	635
Glu Leu Leu Asp Asn Gly Ala Gly Ala Asp Ala Thr Lys Asp Asp Gly		640
645	650	655
Val Tyr Ser Arg Tyr Phe Thr Thr Tyr Asp Thr Asn Gly Arg Tyr Ser		
660	665	670
Val Lys Val Arg Ala Leu Gly Gly Val Asn Ala Ala Arg Arg Arg Val		
675	680	685
Ile Pro Gln Gln Ser Gly Ala Leu Tyr Ile Pro Gly Trp Ile Glu Asn		
690	695	700
Asp Glu Ile Gln Trp Asn Pro Pro Arg Pro Glu Ile Asn Lys Asp Asp		
705	710	715
Val Gln His Lys Gln Val Cys Phe Ser Arg Thr Ser Ser Gly Gly Ser		720
725	730	735
Phe Val Ala Ser Asp Val Pro Asn Ala Pro Ile Pro Asp Leu Phe Pro		
740	745	750
Pro Gly Gln Ile Thr Asp Leu Lys Ala Glu Ile His Gly Gly Ser Leu		
755	760	765
Ile Asn Leu Thr Trp Thr Ala Pro Gly Asp Asp Tyr Asp His Gly Thr		
770	775	780
Ala His Lys Tyr Ile Ile Arg Ile Ser Thr Ser Ile Leu Asp Leu Arg		
785	790	795
Asp Lys Phe Asn Glu Ser Leu Gln Val Asn Thr Thr Ala Leu Ile Pro		800
805	810	815
Lys Glu Ala Asn Ser Glu Glu Val Phe Leu Phe Lys Pro Glu Asn Ile		
820	825	830
Thr Phe Glu Asn Gly Thr Asp Leu Phe Ile Ala Ile Gln Ala Val Asp		
835	840	845
Lys Val Asp Leu Lys Ser Glu Ile Ser Asn Ile Ala Arg Val Ser Leu		
850	855	860
Phe Ile Pro Pro Gln Thr Pro Pro Glu Thr Pro Ser Pro Asp Glu Thr		
865	870	875
Ser Ala Pro Cys Pro Asn Ile His Ile Asn Ser Thr Ile Pro Gly Ile		880
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180 185 190
Val Pro Ala Val Leu Ser Glu Leu Thr Asp Gln Met Ser Phe Thr Asp
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Glu Met Glu Glu Phe Ile Gln Ser Ser Gly Lys Asn Gly Val Val Val
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Gly Gly Lys Trp Gly Ser Glu Glu Arg Lys Arg Ser Met Pro Phe Lys

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Gln Ser Ile Asn Phe Ile Gly Gly Gln Pro Leu Arg Pro Gln Gly Pro		
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Ile Ile Lys Gly Tyr Val Pro Pro Thr Gly Lys Ser Phe Ala Ile Asn		
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Ala Asn Gly Gln His Leu Phe Asp Phe Ala His Arg Leu Ser Ala Phe		
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Gln Arg Val Asp Thr Leu Glu Ile Gln Gly Asp Val Thr Leu Ser Tyr		
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Val Gln Ile		320

TOMATO